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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,147	11/17/2003	Takahiro Kanzaki	P08095US00/DEJ	7294
881	7590	08/12/2005	EXAMINER	
STITES & HARBISON PLLC 1199 NORTH FAIRFAX STREET SUITE 900 ALEXANDRIA, VA 22314			COHEN, AMY R	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/713,147

Applicant(s)

KANZAKI, TAKAHIRO

Examiner

Amy R. Cohen

Art Unit

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*(Handwritten initials)*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by “Ellipse” print out from [www.du.edu/~jcalvert/math/ellipse.htm](http://www.du.edu/~jcalvert/math/ellipse.htm) (pages 1-7) [hereinafter Ellipse].

Ellipse teaches a method for designing an elliptical structure which is symmetrical about the major axis and the minor axis thereof, and which has an outline of an approximate elliptical curve (Page 4), comprising the steps of: establishing the major and minor axes of the approximate elliptical curve (Page 4); drawing a first quadrant part by establishing a first fixed point outside the elliptical curve and along an extension of the minor axis (Page 4); from the first fixed point, drawing a straight line segment along the extension of the minor axis to the farthest end point of the minor axis, said straight line segment passing through the intersecting point of the major axis and the minor axis (page 4); and finally drawing a first circular segment from said farthest end point of the minor axis through an arbitrary angle measured at said first fixed point to a first end point, with the first fixed point as the center and having the same length as that of said straight line segment to serve as the radius, a first straight line segment being defined between the first end point and the first fixed point (page 4); drawing a second quadrant part by establishing a second fixed point on said first straight line segment (Page 4); and drawing a second circular segment following said first end point of said first circular segment through an arbitrary angle set at said second fixed point to a second end point, with the use of the second fixed point as the center, a second straight line segment being defined between the second end

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point and said second fixed point (Page 4); drawing a third quadrant part by establishing a third fixed point on said second straight line segment (Page 4, not all steps are shown but as described, would be used to complete the ellipse); and drawing a third circular segment following second end point of said second circular segment through an arbitrary angle set at said third fixed point, with the use of the third fixed point as the center a third straight line segment being defined between the third end point and said third fixed points (Page 4, not all steps are shown but as described, would be used to complete the ellipse); repeating the steps for further quadrant parts as required (Page 4, not all steps are shown but as described, would be used to complete the ellipse); finally drawing an nth quadrant part by drawing an nth circular segment following an (n-1)th circular segment and ranging from a finish end of the (n-1)th circular segment to the major axis with the use of the intersecting point of an (n-1)th straight line segment and the major axis as the center, and a part of the (n-1)th straight line segment as the radius (Page 4, not all steps are shown but as described, would be used to complete the ellipse); and using these steps to draw the other quadrants and hence for drawing the entire approximate elliptical structure (Page 4, steps of repeating are not shown but necessary for completing the ellipse).

Ellipse teaches a method for designing an elliptical structure which is symmetrical about the major axis and the minor axis thereof, and which has an outline of an approximate elliptical curve (page 4), comprising the steps of: establishing the major and minor axes of the approximate elliptical curve (Page 4); drawing a first quadrant part by establishing a first fixed point outside the elliptical curve and along an extension of the minor axis (Page 4); from the first fixed point, drawing a straight line segment along the extension of the minor axis to the farthest end point of the minor axis, said first straight line segment passing through the intersecting point of the major axis and the minor axis (Page 4); and finally drawing a first circular segment from said farthest end point of the minor axis through an arbitrary angle measured at said first fixed

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point to a first end point, with the first fixed point as the center and the first straight line segment as the radius (Page 4); drawing a second quadrant part by establishing a second fixed point on said first straight line segment (Page 4); and drawing a second circular segment following said first end point of said first circular segment through an arbitrary angle set at said second fixed point to a second end point, with the use of the second fixed point as the center, a second straight line segment being defined between the second end point and said second fixed point (page 4); finally drawing a third quadrant part by drawing a third circular segment following the second circular segment and ranging from the second end point of the second circular segment to the major axis with the use of the intersecting point of the second straight line segment and the major axis as the center and a part of the second straight line segment as the radius (Page 4); and using the steps to draw the other quadrants and hence for drawing the entire approximate elliptical structure (page 4).

Ellipse teaches an elliptical structure which has an outline of an approximate elliptical curve, being constructed using building materials designed by the method as described above (Page 7).

### *Response to Arguments*

3. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following teaches ellipses "On the Construction of Ovals" and "The Ellipse and the Five-centred Arch" printed from <http://users.cs.cf.ac.uk/Paul.Rosin/reasource/papers>,

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Jakubowski (U. S. Patent No. 3,524,257), Hoglund (U. S. Patent No. 3,186,268), Fuess (U. S. Patent No. 3,046,660), Boehm (U. S. Patent No. 3,007,247), and Friedman (U. S. Patent No. 2,677,890).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy R. Cohen whose telephone number is (571) 272-2238. The examiner can normally be reached on 8 am - 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARC  
August 10, 2005



Christopher Fulton  
Primary Examiner  
Tech Center 2800